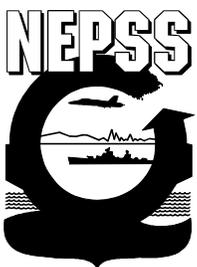




Marine Environmental Update



Unified Policy for Watershed Approach to Federal Land, Resource Management Adopted

On October 18, 2000, the Departments of Agriculture, Defense, Energy and the Interior, the Environmental Protection Agency, the Tennessee Valley Authority, and the Army Corps of Engineers adopted a unified Federal Policy on watershed management. This policy, which provides a framework for a watershed approach to Federal land and resource management activities, is one of the action items in the President's Clean Water Action Plan (see *Marine Environmental Update*, [Vol. FY98, No. 2](#)). The final policy has been revised in response to public comments on the proposed policy published in the Federal Register on February 22, 2000 (65 FR 8833; see *Marine Environmental Update*, [Vol. FY00, No. 2](#)). This policy does not supersede or otherwise affect existing State or Tribal authority under the Clean Water Act. The Federal agencies also acknowledge that, in international waters, the watershed approach is subject to the international treaties and agreements affecting those waters.

The policy has two goals: 1) use a watershed approach to prevent and reduce pollution of surface and ground waters resulting from Federal land and resource management activities; and 2) accomplish this in a unified and cost-effective manner.

The following guiding principles have been incorporated:

- A consistent and scientific approach shall be used to manage Federal lands and resources and to assess, protect, and restore watersheds.
- Specific watersheds shall be identified in which to focus funding and personnel and to accelerate water quality, aquatic habitat, and condition improvements.

ALSO IN THIS ISSUE:

EPA Reissues Storm Water MSGP for Industrial Activities	2
EPA Releases Regulatory Agenda	3
Permitting Guidance Drafted for Discharges into Impaired Waterbodies	4
FWS Issues Final Tidewater Goby Critical Habitat Designation	6
FWS Finalizes San Diego Fairy Shrimp Critical Habitat	7
Coastal California Gnatcatcher Critical Habitat Determination	7
California Certifies Benthic Flux Sampling Device Technology	9
DOD Releases Coral Reef Protection Implementation Plan	11
Guidance on Use of Fish/Shellfish Advisories in TMDL Listing	11
About the <i>Marine Environmental Update</i>	13

Read me on-line at: environ.spawar.navy.mil/Programs/MESO/Newsltr



SPAWAR
Systems Center
San Diego

- The results of watershed assessments shall be used to guide planning and management activities in accordance with applicable authorities and procedures.
- The implementation of this policy shall be accomplished in close cooperation with States, Tribes, local governments, private landowners, and stakeholders.
- Clean Water Act responsibility to comply with applicable Federal, State, Tribal, interstate, and local water quality requirements shall be met to the same extent as non-governmental entities.
- Steps shall be taken to help ensure that Federal land and resource management actions are consistent with applicable Federal, State, Tribal, and local government water quality management programs.

The complete text of the final policy is [available from MESO](#) (231 KB Adobe™ Acrobat™ file). More information can also be found at: <http://www.cleanwater.gov/ufp>.

Federal Register, Volume 65, Number 202, Wednesday, October 18, 2000, pp. 62565-62572.



EPA Reissues Storm Water Multi-Sector General Permit for Industrial Activities

On October 30, 2000, the Environmental Protection Agency reissued its National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities (MSGP 2000), proposed on March 30, 2000 (65 FR 17010; see *Marine Environmental Update Bulletin*, [March 30, 2000](#)). The original multi-sector general permit was first issued on September 29, 1995 (60 FR 50804; see *Marine Environmental Update*, [Vol. FY96, No. 1](#)).

Following below is a list of some of the major changes in the reissued MSGP.

1. Requirements for co-located activities have been clarified (Part 1.2.1.1).
2. Incidental cooling tower mist discharges have been included as an authorized non-storm water discharge, subject to certain requirements (Parts 1.2.2.2.13 and 4.4.2.3).
3. Eligibility has been provided for coverage of inactive mining activities occurring on Federal Lands where an operator has not been identified (Part 1.2.3).
4. The language for situations where a discharge previously covered by an individual permit can be covered under the reissued MSGP has been clarified (Part 1.2.3.3).
5. Additional language for compliance with water quality standards and requirements for follow-up actions if standards are exceeded has been added and the original language clarified (Parts 1.2.3.5 and 3.3).
6. ESA and NHPA eligibility requirements have been modified (Parts 1.2.3.6 and 1.2.3.7).
7. Eligibility requirements for discharges to water quality impaired/limited waterbodies have been added and/or clarified (Part 1.2.3.8).





SPAWAR
Systems Center
San Diego

8. Clarified the language stating that discharges that do not comply with anti-degradation requirements are not authorized by the permit (Part 1.2.3.9).
9. Opportunity for termination of permit coverage based on the “no exposure exemption” from the Phase II storm water regulations (64 FR 68722, 12/8/99) has been added (Parts 1.5 and 11.4).
10. Notice of Intent (NOI) requirements have been amended and the form modified (Part 2.2 and Addendum D) and accommodation for electronic filing of forms added (Parts 2.3 and 7.1).
11. Prohibitions on discharges of solid materials and floating debris and a requirement to minimize off-site tracking of materials and generation of dust have been added (Part 4.2.7.2.3).
12. A requirement to include a copy of the permit with the storm water pollution prevention plan (SWPPP) was added (Part 4.7).
13. Special conditions for EPCRA 313 facilities were modified (Part 4.12).
14. Monitoring requirements were reorganized and additional clarification/revisions on monitoring periods, waivers, default minimum monitoring for limitations added by State 401 certification, and reporting requirements were added (Part 5).
15. New effluent limitations guidelines for landfills in Sectors K and L were included; the final guidelines were published in the Federal Register on January 19, 2000 (65 FR 3007) (Parts 6.K.5 and 6.L.6).
16. The Sector AD (Non-Classified Facilities) language was clarified to say that facilities cannot choose coverage under Sector AD, but can only be so assigned by permitting authority (Part 6.AD).
17. Additional BMP requirements in Sectors S, T, and Y were added (Parts 6.S, 6.T, and 6.Y).
18. A NOI to continue coverage under the permit when it expires (without a replacement permit in place) is not required and the reapplication process has been clarified (Part 9.2).
19. The process for the EPA to remove facilities from permit coverage was clarified (Part 9.12).

The MSGP became effective on October 30, 2000 and expires at midnight on October 30, 2005. The complete text of the MSGP, including a fact sheet and the EPA’s responses to comments, is [available from MESO](#) (1.26 MB Adobe™ Acrobat™ file). More information can also be found at: <http://www.epa.gov/owm/sw>.

Federal Register, Volume 65, Number 210, Monday, October 30, 2000, pp. 64745-64880.



EPA Releases Regulatory Agenda

On November 30, 2000, the Environmental Protection Agency published its Semiannual Agenda of Regulatory and Deregulatory Actions listing regulations currently under development, reviews of existing regulations, and rulemakings completed or cancelled since the publication of the previous agenda. The unified agenda contains information on EPA pre-rulemakings, proposed rules, final rules long-term actions, and completed actions.





SPAWAR
Systems Center
San Diego

Water Quality Standards Regulation Revision

The EPA proposes revisions to Federal Water quality standards under 40 CFR 131 to strengthen regulations and enhance water quality management on a watershed basis. Program areas identified for revision include mixing zone policies and procedures. The Advanced Notice of Public Rulemaking (ANPRM) was issued on July 7, 2000 (63 FR 36741; see *Marine Environmental Update Bulletin*, [July 13, 1998](#)). The Notice of Public Rulemaking (NPRM) is scheduled for March 2001, and the final action scheduled for April 2002.

Ocean Discharge Criteria Revisions

The EPA is proposing to modify CWA Section 403 regulations to address the application of scientific criteria to ocean discharge permits. These would apply in addition to general National Pollutant Discharge Elimination System (NPDES) permit requirements under Section 402. The NPRM is scheduled for December 2000, and the final action scheduled for January 2002.

Definition of Waters of the United States

The proposed joint rulemaking by the EPA and the Army Corps of Engineers would amend the regulatory definition of waters of the United States to clarify the basis for asserting CWA jurisdiction over isolated intrastate waters and wetlands. The NPRM is scheduled for August 2001, and the final action scheduled for January 2002.

The complete text of the 159-page agenda is [available from MESO](#) (823 KB Adobe™ Acrobat™ file).

Federal Register, Volume 65, Number 231, Thursday, November 30, 2000, pp. 74477-74635.

EPA Permitting Guidance Drafted for Discharges into Impaired Waterbodies

Environmental Protection Agency Region 9 (AZ, CA, HI, NV, WA, Pacific islands) has released draft guidance for permitting discharges into impaired waterbodies that do not already have total maximum daily loads (TMDLs) established. It focuses on two types of limits: 1) limits if impairment is based only on water column exceedances of the numeric criteria; and 2) limits if impairment is based on fish tissue levels and/or levels in sediment.

States that are authorized to use compliance schedules do not necessarily need to include a final water quality-based effluent limit (WQBEL) as a provision in the permit when the compliance schedule exerts beyond the life of the permit. However, the findings in the permit must state that a WQBEL will be established at the end of the compliance schedule and must state what the limit would be should a TMDL not be finalized. If an alternative WQBEL/WLA (wasteload allocation) is established during the TMDL process, the permit could be either reopened and/or modified during the permit renewal process to include the new limits.





SPAWAR
Systems Center
San Diego

In general, the permit should state that:

1. The permittee may not increase the mass of these pollutants in the interim, unless in compliance with a WLA or pursuant to an anti-degradation analysis;
2. The permittee may accomplish this through source control and treatment; through recycling/reclamation; or by reducing the loads elsewhere in the watershed through an approved offset program;
3. The permittee should conduct a reasonable amount of ambient monitoring as necessary for the TMDL development objective;
4. The permittee, within one year, should develop and implement a pollutant minimization program;
5. Within the life of the permit, the permittee should identify treatment option and estimate the level of reduction and costs of all treatments; and
6. Within the life of the permit, permittees should identify other sources of pollutants entering the watershed, which are available for offsets, and estimate the costs and levels of reduction of these potential offsets.

Offsets are defined as reductions achieved through the discharger's actions in loadings of the pollutant causing impairment. Reductions must be from a source that is either not regulated under any environmental statute, or cannot be readily controlled due to significant resource constraints or inability to locate the responsible party. They also must be into the same body of water to which the permitted facility discharges. If the permitting authority determines that offsets are appropriate, permits must assure that:

- An offset ratio defining the relationship between the mass of the pollutants from the outfall and the mass discharged at the "offset source" has been determined;
- A monitoring program is implemented that accurately determines both loadings from a permittee's outfall and an estimate of loading reduction from offset sources; and
- Limits in the permit are written that clearly indicate how compliance with offset program mass limits will be assessed.

It may be appropriate for many dischargers to work together on offset projects thus allowing the WLA for all dischargers to be combined and offsets achieved by the group as a whole would count towards offsetting their combined net loading. So long as the combined running balance reaches zero by the end of the permitting cycle, all dischargers would be in compliance with their WLAs.

The draft guidance document is available at <http://www.epa.gov/region09/water/npdes/draftguidance.pdf> (109 KB Adobe™ Acrobat™ file).

EPA Region 9, Draft Permitting Guidance for Permitting Discharges into Impaired Waterbodies in Absence of TMDL, May 9, 2000.

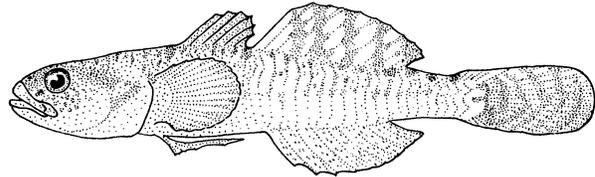




SPAWAR
Systems Center
San Diego

FWS Issues Final Tidewater Goby Critical Habitat Designation

On November 20, 2000, the U.S. Fish and Wildlife Service issued the final designation of critical habitat for the Tidewater Goby, *Eucyclogobius newberryi* (see *Marine Environmental Update*, [Vol. FY99, No.4](#)). The designation includes 10 coastal stream segments in Orange and San Diego counties, California, totaling approximately 9 linear miles of streams. Critical habitat includes stream channels and their associated wetlands, flood plains, and estuaries. These habitat areas provide for the primary biological needs of foraging, sheltering, reproduction, and dispersal, which are essential for the conservation of the tidewater goby.



The following areas have been designated as critical habitat:

- Aliso Creek (Orange County) and its associated lagoon and marsh from the Pacific Ocean to approximately 0.6 miles upstream;
- San Mateo Creek and its associated lagoon and marsh, from the Pacific Ocean to approximately 0.9 miles upstream;
- San Onofre Creek and its associated lagoon and marsh from the Pacific Ocean to approximately 0.4 miles upstream;
- Las Flores Creek and its associated lagoon and marsh from the Pacific Ocean to Interstate 5 (approximately 0.6 miles upstream);
- Hidden Creek and its associated lagoon and marsh from the Pacific Ocean to Interstate 5 (approximately 0.5 miles upstream);
- Aliso Creek and its associated lagoon and marsh from the Pacific Ocean to Interstate 5 (approximately 0.4 miles upstream);
- French Creek and its associated lagoon and marsh from the Pacific Ocean to Interstate 5 (approximately 0.4 miles upstream);
- Cockleburr Creek and its associated lagoon and marsh from the Pacific Ocean to Interstate 5 (approximately 0.6 miles upstream);
- Santa Margarita River from the Pacific Ocean to a point approximately 3.1 miles upstream; and
- Agua Hedionda Lagoon and its associated marsh and creek from the Pacific Ocean to a point approximately 2.3 miles upstream.

Although the majority of land being proposed for designation is under Federal administration and management, some estuary and riparian habitats are on State, county, city and private lands. The segments on San Mateo Creek, San Onofre Creek, Las Flores Creek, Hidden Creek, Aliso Creek, French Creek, Cockleburr Creek, and the Santa Margarita River are on Marine Corps Base Camp Pendleton.

The rule has an effective date of December 20, 2000. For further information contact: Ken Berg, Field Supervisor, Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2730 Loker Avenue West,





SPAWAR
Systems Center
San Diego

Carlsbad, California 92008; telephone (760) 431-9440, facsimile (760) 431-5902. The full text of this rule is [available from MESO](#) (266 KB Adobe™ Acrobat™ file).

Federal Register, Volume 65, Number 224, Monday, November 20, 2000, pp. 69693-69717.



FWS Finalizes San Diego Fairy Shrimp Critical Habitat

On October 23, 2000, the U.S. Fish and Wildlife Service designated 4,025 acres of land in Orange and San Diego counties as critical habitat for the endangered San Diego Fairy Shrimp, *Branchinecta sandiegonensis* (see *Marine Environmental Update*, [Vol. FY00, No. 2](#)). Lands designated as critical habitat include 62 acres in Fairview Regional Park in Orange County and 3,042 acres within the City of San Marcos and the community of Ramona. The cities of Carlsbad, Chula Vista and San Diego contain additional critical habitat designations.

Lands on Marine Corps Air Station Miramar were originally considered for inclusion, but were not designated as critical habitat due to the base's Integrated Natural Resources Management Plan (INRMP), which was shown to provide sufficient protection for the fairy shrimp. Lands on Camp Pendleton have also been excluded because the benefits of excluding them outweigh the benefits of including them. The FWS is currently working with Marine Corps Base Camp Pendleton to provide long-term protection for the fairy shrimp and other species through its INRMP (see related article, below).

The complete text of the final rule is [available from MESO](#) (8.95 MB Adobe™ Acrobat™ file). For further information contact: Ken Berg, Field Supervisor, Carlsbad Fish and Wildlife Office, 2730 Loker Avenue West, Carlsbad, California 92008; telephone: (760) 431-9440; facsimile: (760) 431-9624.

Federal Register, Volume 65, Number 205, Monday, October 23, 2000, pp. 63437-63466.



Coastal California Gnatcatcher Critical Habitat Final Determination

On October 24, 2000, the U.S. Fish and Wildlife Service issued its final determination of Critical Habitat for the California Coastal Gnatcatcher, *Poliophtila californica californica* (see *Marine Environmental Update*, [Vol. FY00, No. 2](#)). Effective November 24, 2000, a total of approximately 207,890 hectares (513,650 acres) in Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties, California, are designated as critical habitat for the coastal California gnatcatcher. Based on a review of public comments received on the proposed determination of critical habitat for the gnatcatcher, the Fish and Wildlife Service reevaluated their proposed designation of critical habitat for the gnatcatcher. This resulted in five significant changes that are reflected in this final determination. These are 1) a reduction in the minimum mapping unit for defining critical habitat boundaries, 2) the loss of a primary habitat





SPAWAR
Systems Center
San Diego

connection in Riverside County from the designation, 3) the exclusion, under Section 4(b)(2) of the Endangered Species Act, of some lands covered by approved habitat conservation plans (HCPs) for the gnatcatcher, 4) the exclusion of Marine Corps Air Station, Miramar from the designation due to an existing, finalized resource management plan, and 5) the exclusion under Section 4(b)(2) of Marine Corps Base Camp Pendleton because the designation would significantly impair critical, ongoing training and related operations.

Of the 13 areas designated by the FWS, Unit 4 encompasses approximately 3,515 ha (8,690 ac) on Fallbrook Naval Weapons Station in northern San Diego County. The unit provides a significant segment of a corridor of sage scrub between core gnatcatcher populations on Camp Pendleton and populations in southwestern Riverside County (Unit 10). Unit 7 encompasses approximately 2,340 ha (5,780 ac) within the Orange County Central/Coastal NCCP planning area. It includes the designated reserve (panhandle portion) of Marine Corps Air Station El Toro.

Marine Corps Air Base Miramar is the only DOD installation that has completed a final Integrated Natural Resources Management Plan (INRMP) that provides for sufficient conservation management and protection for the gnatcatcher. After extensive review, the FWS determined that the final INRMP addresses and meets the following three criteria:

1. A current INRMP must be complete and provide a conservation benefit to the species;
2. The plan must provide assurances that the conservation management strategies will be implemented; and
3. The plan must provide assurances that the conservation management strategies will be effective, by providing for periodic monitoring and revisions as necessary.

Therefore, lands on Marine Corps Air Base Miramar do not meet the definition of critical habitat and have been excluded from the final designation of critical habitat for the gnatcatcher. In contrast to Marine Corps Air Base Miramar, other military installations within the area proposed as critical habitat for the gnatcatcher have not yet completed INRMPs. The INRMP for Camp Pendleton, which represents one of the largest contiguous blocks of coastal sage scrub in southern California, will be completed by the statutory deadline of November 17, 2001.

Out of the 46 training or joint use areas on Camp Pendleton, the proposal included all of 22 and portions of 9 such areas, which were concentrated on the coastal portion of the Base. In addition, the proposal included three of four principal landing beaches and the key inland training areas adjacent to these beaches where Marines train in amphibious warfare, large and small tactics, and warfighting skills. Camp Pendleton is the Marine Corps' only amphibious training base on the Pacific coast. While the proposed critical habitat encompassed more than 40 percent of the Base, the FWS has stated it fully expects that, once the INRMP is completed and approved, areas of the base included in the proposed critical habitat designation will no longer meet the definition of critical habitat, as they will require no additional special management or protection. In the interim, the FWS has determined that it is appropriate to exclude Camp Pendleton from this critical habitat designation under Section 4(b)(2).





SPAWAR
Systems Center
San Diego

The complete text of the final rule is [available from MESO](#) (713 KB Adobe™ Acrobat™ file). For further information contact: Ken Berg, Field Supervisor, Carlsbad Fish and Wildlife Office, 2730 Loker Avenue West, Carlsbad, California 92008; telephone: (760) 431-9440; facsimile: (760) 431-9624.

Federal Register, Volume 65, Number 206, Tuesday, October 24, 2000, pp. 63679-63743.



Benthic Flux Sampling Device Technology Receives California Certification

The Benthic Flux Sampling Device (BFSD) is a benthic lander (see photograph, right) for *in-situ* measurements of metal contaminant fluxes from or into shallow marine sediments. The BFSD was designed and developed by scientists at the Environmental Sciences Division, Space and Naval Warfare Systems Center, San Diego, to further characterize metal contamination problems in bays, harbors and coastal waters resulting from a variety of sources, including ships, shoreside facilities, municipal outfalls, spills and non-point source runoff (see *Marine Environmental Update, Vol. FY96, No. 1*). The Navy has received a U.S. Patent (#5473952) for the BFSD and California Registered Service Mark Number 046720.



The technology provides a means to assess contaminant mobility by directly measuring and quantifying the contaminant flux across the sediment-water interface. Other techniques for estimating fluxes across the sediment-water interface rely on measurement of sediment pore water concentrations as a basis for calculating a diffusive flux. In contrast, the BFSD collects samples over time to allow a direct determination of the total flux, which may also include exchanges between sediment pore water and the overlying water from biological or other non-diffusive processes.

The BFSD is capable of:

- Deployment from a small surface craft using light duty handling equipment;
- Operation in a marine environment at depths to 20 meters and bottom currents to two knots;
- Remote real-time video imaging of the bottom site prior to autonomous operations;
- Programmable, microprocessor-controlled autonomous operation for up to 96 hours;



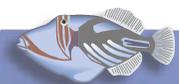


SPAWAR
Systems Center
San Diego

- Placement (bottom landing) with minimal disturbance of bottom sediments;
- Isolation and maintenance of homogenous conditions in approximately 30 liter volume of bottom water for the period of sample collection;
- Maintenance of oxygen content in the sample chamber within two milliliters per liter of initial conditions;
- Collection of up to twelve 250 milliliter water samples from the chamber at selected intervals;
- Measurement and storage of sample chamber depth, dissolved oxygen, pH, conductivity/ salinity, and temperature data at selected intervals throughout deployment;
- Recovery using a portable acoustic signal device to activate a tethered marker buoy;
- Quantification of flux rates for Arsenic, Cadmium, Copper, Nickel, Lead, and Zinc based on a least-squares, linear regression of concentrations from six to 12 samples;
- Identification of statistically significant flux rates based on comparison of sediment flux rates measured at the site to flux rates measured in a “blank” BFSD chamber containing sea water isolated from the sediment;
- Blank BFSD chamber performance meeting the following performance standards:

Metal	Blank Flux ($\mu\text{g}/\text{m}^2/\text{day}$)	$\pm 95\%$ Confidence Interval
Arsenic	5.16	2.10
Cadmium	0.52	0.75
Copper	2.82	8.73
Nickel	10.28	7.34
Lead	3.16	1.59
Zinc	3.38	65.22

- Verification of proper flux chamber seal and sample collection based on silica concentrations within the chamber during the measurement period; and
- Identification of environmentally significant fluxes on the basis of comparisons/relations such as:
 - a) Other known contaminant sources;
 - b) Hydrodynamic flushing rates of the basin;
 - c) Remobilization due to other mechanisms such as sediment resuspension;
 - d) Fluxes measured prior to placement of a containment system such as a cap;
 - e) Fluxes measured prior to removal of contaminated sediments;
 - f) Bioaccumulation in marine organisms at the site; and
 - g) Mass balance analysis of input and loss rates for sediment.





SPAWAR
Systems Center
San Diego

The complete text of the notice is [available from MESO](#) (313 KB Adobe™ Acrobat™ file). For more information, contact the Benthic Flux Sampling Device Program Office at bfsd@spawar.navy.mil; telephone: (619) 553-5333; DSN 553-5333.

California Regulatory Notice Register, Volume 2000, No. 42-Z, October 20, 2000, pp. 1697-1704.



DOD Releases Coral Reef Protection Implementation Plan

Executive Order 13089 on Coral Reef Protection (see *Marine Environmental Update*, Vol. [FY99, No. 3](#)) directs Federal agencies to study, restore and conserve U.S. coral reef ecosystems, and establishes a U.S. Coral Reef Task Force comprised of Federal departments and agencies charged with overseeing implementation of the Order. The Department of Defense is a member of the Task Force and is represented by the Assistant Secretary of the Navy (Installations and Environment).

In October 2000, the DOD finalized its Coral Reef Protection Implementation Plan outlining policies and actions to implement the military's responsibilities under the Executive Order. The plan contains a comprehensive overview of Army, Navy, Air Force and Marine Corps policies and programs related to coral reef protection, describes military activities potentially affecting coral reef ecosystems and lists funding sources for coral reef conservation activities. The plan also discusses DOD research, outreach, and stewardship initiatives, planned and in progress, designed to protect and enhance coral reef ecosystems.

The plan was formally distributed to the U.S. Coral Reef Task Force and is available to the public via the Internet (12.9 MB Adobe™ Acrobat™ file) on the Defense Environmental Network Information Exchange (DENIX) at <http://www.denix.osd.mil>.



EPA Guidance on Use of Fish/Shellfish Advisories in TMDL Listing

In guidance made available on October 31, 2000, the Environmental Protection Agency said that shellfish advisories should be used as a source of data for determining whether to list specific waters as impaired water bodies. The EPA recommends that a State, Territory, or authorized Tribe include on its Federal Water Pollution Control Act (Clean Water Act) Section 303(d) list, at a minimum, waters where a fish or shellfish consumption advisory or National Shellfish Sanitation Program (NSSP) classification demonstrates non-attainment of water quality standards (*i.e.*, the advisory or classification is based on tissue data, the data are from the specific waterbody in question, and the risk assessment parameters of the advisory or classification are cumulatively equal to or less protective than those in the water quality standards). When listing waters under Section 303(d) or 305(b), based on a fish advisory, common migratory waters of the monitored species should also be listed. In addition, the EPA believes it is





SPAWAR
Systems Center
San Diego

reasonable for a State, Territory, or authorized Tribe to include any other water having a fish or shellfish consumption advisory or NSSP lower-than-Approved (non- precautionary) classification as impaired on its Section 303(d) list if the State, Territory, or authorized Tribe believes it is appropriate.

For purposes of determining whether a waterbody is impaired and should be included on a Section 303(d) list, the EPA considers a fish or shellfish consumption advisory, a NSSP classification, and the supporting data, to be existing and readily available data and information that demonstrates non-attainment of a Section 101(a) “fishable” use when:

1. The advisory is based on fish and shellfish tissue data;
2. A lower than “Approved” NSSP classification is based on water column and shellfish tissue data (and this is not a precautionary “Prohibited” classification or the state water quality standard does not identify lower than “Approved” as attainment of the standard); and
3. The data are collected from the specific waterbody in question and the risk assessment parameters (*e.g.*, toxicity, risk level, exposure duration and consumption rate) of the advisory or classification are cumulatively equal to or less protective than those in the State, Territory, or authorized Tribal water quality standards.

This applies to all pollutants that constitute potential risks to human health, regardless of the source of the pollutant. However, for fish/shellfish advisories for “dioxin and dioxin-like compounds”, due to unique risk characterization issues, listing decisions should be made on a case-by-case basis. The EPA is currently evaluating the role of fish advisories as part of its overall strategy to reduce human exposure to dioxin and dioxin-like compounds. The EPA is planning to develop additional guidance specific to dioxin and dioxin-like compounds in the near future.

Where States, Territories, or authorized Tribes do not include a waterbody on the Section 303(d) list because the advisory or the NSSP classification may not demonstrate impairment, the EPA recommends that the waterbody be listed as threatened under Section 305(b).

Some fish and shellfish consumption advisories and NSSP classifications are based on Food and Drug Administration action levels as opposed to the EPA’s risk-based methodology for the protection of human health. FDA action levels are established to protect consumers of interstate shipped, commercially marketed fish and shellfish rather than fish and shellfish caught and consumed within the state. FDA action levels also include non-risk based factors (*e.g.*, economic impacts) in their derivation, while water quality criteria must protect the designated uses without regard to economic impacts. The EPA has therefore concluded that FDA action levels do not provide a greater level of protection for consumers of fish and shellfish caught and consumed within the state than do human health criteria.

Further information can be found at <http://www.epa.gov/ost/library/wqstandards/shellfish.html>.





SPAWAR
Systems Center
San Diego

The *Marine Environmental Update* is produced quarterly as an information service by the Marine Environmental Support Office (MESO) to inform the Navy environmental community about issues that may influence how the Navy conducts its operations. The contents of this document are the responsibility of the Marine Environmental Support Office and do not represent the views of the United States Navy. References to brand names and trademarks in this document are for information purposes only and do not constitute an endorsement by the United States Navy. All trademarks are the property of their respective holders. Approved for public release; distribution is unlimited.

The Marine Environmental Support Office may be reached at:

MARINE ENVIRON SUPPORT OFC
SPAWARSYSNEN D3621
53475 STROTHER ROAD
SAN DIEGO CA 92152-6326

Voice: 619.553.5330/5331; DSN 553.5330/5331
Facsimile: 619.553.5404; DSN 553.5404

E-mail: meso@spawar.navy.mil
PLAD: SPAWARSYSNEN SAN DIEGO CA

WWW: environ.spawar.navy.mil/Programs/MESO

